

DAY: 2
Date : 26.04.2023 (Wednesday)

Technical Session: 6

Topic: Application of Remote Sensing and Precision Technology	Time : 10.00 AM to 5.00 PM	Venue : Academic Complex Building (IDA) Room No. 3
Chairperson: Dr. P. K. Agrawal, Director, NESAC, Barapani Co.-Chairperon : Dr. Bijoy Krishna Handique Scientist/Engineer at North Eastern Space Applications Centre (NESAC)	Moderator 1: Dr. Jonali Goswami, NESAC 2. Dr. Bipul Deka, Department of Soil Science, AAU, Jorhat	Reporters : 1. Er. Kabyashree Choudhury, Department of Agril. Engineering, AAU 2. Er. Ranjana Deka, Department of Agril. Engineering, AAU

Sl.No	Topic	Affiliation	Mail id	Mode
1.	GEOSPATIAL DIGITAL TECHNOLOGY: PROSPECTS AND CHALLENGES	Dr. Renaud, The <u>International Rice Research Institute</u> , Philippines		Key Note
2.	ROLE OF ADVANCED GEOSPATIAL TECHNOLOGY IN AGRICULTURE AND ALLIED AREAS	Dr. Bijoy Krishna Handique Scientist/Engineer at North Eastern Space Applications Centre (NESAC) Jonali Goswami ¹ , Senpakapriya V ¹ , Ranjan Das ²	bkhandique@gmail.com	Key Note
3.	SPACE-BASED OBSERVATION FOR CLIMATE CHANGE STUDIES IN AGRICULTURE–GLOBAL PERSPECTIVE	¹ North Eastern Space Applications Centre, Umiam-793103 ² Assam Agricultural University, Jorhat-785013	jonali.goswami@gmail.com,	Key note

4.	APPLICATIONS OF REMOTE SENSING AND GIS TECHNOLOGY IN SERICULTURE.	Ajit Ghanshyam Tapare Assam Agricultural University	tapare45@gmail.com	Poster
5.	SPECTRAL PROPERTIES OF SODIUM SALT DOMINATED SOILS AND DEVELOPMENT OF SOIL REFLECTANCE LIBRARY	Arijit Barman ^{1,3, *} , Rajeev Srivastava ² , K.K. Mourya ¹ , Surabhi Hota ¹ , R.S. Meena ¹ , and U.S. Saikia ¹ ¹ ICAR- National Bureau of Soil Survey and Land Use Planning, Jorhat, Assam ² ICAR- National Bureau of Soil Survey and Land Use Planning, Nagpur, Maharashtra ³ ICAR-Central Soil Salinity Research Institute, Karnal 132 001, Haryana	arijit.barman@icar.gov.in	Oral
6.	USE OF REMOTE SENSING AND GIS BASED APPROACHES FOR ASSESSING THE IMPACT OF CLIMATE CHANGE ON RIVERBANK EROSION	Bipasha Borkotoky ^{*a} , Dr. BipulDeka ^b Department of Soil Science, Assam Agricultural University Department of Soil Science, Assam Agricultural University	bipasha.borkotoky.am j21@aau.ac.in	Poster
7.	ARTIFICIAL INTELLIGENCE, MACHINE LEARNING AND BIGDATA TO OPTIMIZE RESOURCES USING UNMANNED AERIAL SYSTEMS FOR SUSTAINABLE CROP PRODUCTION, ENHANCE FOODSECURITY, BIODIVERSITY AND CLIMATE CHANGE	Ganesh C. Bora, Ph.D. Fayetteville State University, Fayetteville, North Carolina USA	gbora@uncfsu.edu	Keynote
8.	SUGARCANE ACREAGE PREDICTION USING SENTINEL 2A SATELLITE DATA AND GIS IN	<u>Garde Y. A.</u> ^{1*} , Swaroop D B ¹ , Thorat V. S. ² , Shinde V. T. ³ , Nitin Varshney ¹ and Alok Shrivastava ¹	y.garde@nau.in	Oral

	NAVSARI DISTRICT OF GUJARAT FOR SUSTAINABLE PRODUCTION	¹ Department of Agricultural Statistics, N.M. College of Agriculture, Navsari Agricultural University, Navsari, Gujarat, India – 396 450 ² Department of Agribusiness Economics & Finance, ASPEE Agribusiness Management Institute, Navsari Agricultural University, Navsari, Gujarat, India – 396 450 ³ Department of Agricultural Engineering, N.M. College of Agriculture, Navsari Agricultural University, Navsari, Gujarat, India – 396 450		
9.	NETWORK FOR INFORMATION ON CLIMATE (EX) CHANGE FOR FARMERS AS MULTI-MODAL APPROACH	Holmukhe S.S and Kadam R.P Department of Extension Education, VNMKV, Parbhani. (M. S.)	(ss.holmukhe@gmail.com) (rpk.mkv@gmail.com)	Poster
10.	ESTIMATION OF CROP WATER REQUIREMENTS FOR KHARIF RICE OVER RI-BHOI DISTRICT OF MEGHALAYA	Evakordor Jyrwa ^{1,2} , R.K. Singh ¹ and Jonali Goswami ² 1G.B.Pant University of Agriculture and Technology, Pantnagar, Udham Singh Nagar, Uttarakhand – 263145 2North Eastern Space Applications Centre, Umiam - 793103	jenova.jyrwa65@gmail.com, rajksingh19@gmail.com, jonali.goswami@gmail.com	Oral
11.	SOIL CHARACTERIZATION AND LAND SUITABILITY EVALUATION FOR LAND USE PLANNING USING GEOSPATIAL TECHNIQUES IN THE LOWER BRAHMAPUTRA VALLEY ZONE OF ASSAM	K. K. Mourya*, S. Hota, A. Barman, R. S. Meena & U. S. Saikia ICAR-National Bureau of Soil Survey and Land Use Planning, Jorhat-785004, Assam, India	kkm.iari@gmail.com	Poster
12.	LAND USE CHANGES AND THEIR	Rakhi Yadav, Dhanya Bhaskar, Samudyatha R	rakhiyadav24@iifmbh	Oral

	IMPACTS ON ECOSYSTEM SERVICE SUPPLY FROM AN URBAN PROTECTED AREA: THE CASE OF BANNERGHATTA NATIONAL PARK (BNP), BENGALURU	and Sarang KT Indian Institute of Forest Management, Bhopal, Madhya Pradesh, 462003	opal.edu.in	
13.	PRECISION FARMING TECHNOLOGIES AND THEIR APPLICATION	LinthoingambiNingombam and B.N Hazarika College of Horticulture and Forestry, Central Agricultural University (CAU), Pashighat- 791102, Arunachal Pradesh, India.	linthoingombam5@gmail.com	Poster
14.	PROJECTING AND ASSESSING TEMPERATURE EXTREME INDICES IN BANGLADESH EMPLOYING CMIP6 MULTI-MODEL ENSEMBLES	Mst. Yeasmin Akter ^{1**} , Abu Reza Md. Towfiqul Islam ^{1*} ¹ Department of Disaster Management, Begum Rokeya University, Rangpur, 5400, Bangladesh	(yeasmin.swapna.dm@gmail.com) (towfiq_dm@brur.ac.bd)	Oral
15.	STATUS OF LANDSCAPE ECOLOGY FROM SPACE: A STUDY OF ANALYZING THE PULSE OF THE PLANET	Namita Sharma ¹ Rimlee Bora ¹ Department of Geography, Gauhati University, Guwahati -781014, Assam, India	mita199130@gmail.com	Poster
16.	REMOTE SENSING TECHNIQUES IN MONITORING AND ASSESSMENT OF DROUGHT	Nayanjyoti Sarma ¹ , Dr. Prasanta Neog ² and Parishmita Das ³ Department of Agricultural Meteorology, Assam Agricultural University, Jorhat, 785013, Assam, India Department of Agricultural Meteorology, BNCA, Assam Agricultural University, Jorhat, 785013, Assam, India	nayanjyoti.sarma.amj21@aau.ac.in	Poster

		Department of Agricultural Meteorology, Assam Agricultural University, Jorhat, 785013, Assam, India		
17.	PROJECTION OF FUTURE PRECIPITATION IN BANGLADESH AT KHARIF-II SEASON BY USING GEOSPATIAL TECHNIQUES	<p>Md. Abdullah Aziz¹, Niaz Md. Farhat Rahman¹, Hasib Us Shahid Shohan², Mohammad Chhiddikur Rahman¹, Sheikh Arafat Islam Nihad¹, S M Quamrul Hassan³, Md. Shahjahan Kabir¹, Md. Ismail Hossain¹, Rokib Ahmed¹, Md. Abdul Qayum¹, Md. Abdullah Al Mamun¹.</p> <p>¹Bangladesh Rice Research Institute, Gazipur-1701, Bangladesh; ²Nature Conservation Management (NACOM), Dhaka, 1212, Bangladesh ³Bangladesh Meteorological, Department, Agargaon, Dhaka-1207, Bangladesh</p>	<p>abdullahaziz.stat@brrri.gov.bd; niaz.stat@brrri.gov.bd, chhiddikur.econ@brrri.gov.bd, nihad.path@brrri.gov.bd, mihossain.stat@brrri.gov.bd, rokib.ictcell@brrri.gov.bd; aqayum.stat@brrri.gov.bd; mamunru.stat@brrri.gov.bd; dg@brrri.gov.bd hsshohan@gmail.com ; smquamrul77@yahoo.com</p>	Oral
18.	USING THE LANDSAT-8 DATA TO ASSES FRUIT TREE CROP PERFORMANCE IN EASTERN BRAHMAPUTRA VALLEY	<p>Dibyendu Deb*, A. Pongener, A. Bhowmik, D. Baruah, , A. Baruah, , P. Gaibimei, S. Mandi and C. J. Mate</p> <p>ICAR-Indian Agricultural Research Institute, DirpaiChapori, Gogamukh-787034, Dhemaji, Assam</p>	<p>debiasri@gmail.com</p>	Poster
19.	REMOTE SENSING AND GEOGRAPHIC INFORMATION SYSTEM TECHNIQUES FOR	<p>P.K. Bharteey, Bipul Deka¹ and Marami Dutta²</p> <p>Department Agricultural Chemistry and Soil</p>	<p>prembharti406@gmail.com</p>	Poster

	MORPHOMETRIC ANALYSIS: A REVIEW	Science, C.C.R. (P.G.) College, Muzaffarnagar-251001, (Uttar Pradesh), India ¹ AICRP on IWM, Assam Agricultural University, Jorhat-785013, Assam, India ² Department of Soil Science, Assam Agricultural University, Jorhat-785013, Assam, India		
20.	SPATIO-TEMPORAL VARIATIONS IN HIGH-ALTITUDE LAKES OF SELECTED RIVER BASINS OF ARUNACHAL PRADESH	RimumMurtem*, SameerMandal, Megozeno, IhalungHerie, Tasso Tare, Mori Kamdak, AditiBhadra, Arnab Bandyopadhyay Department of Agricultural Engineering, North Eastern Regional Institute of Science and Technology, Nirjuli (Itanagar) – 791109, Arunachal Pradesh, India	rimummurtem1@gmail.com	Oral
21.	ARTIFICIAL INTELLIGENCE AND IT'S APPLICATION IN SERICULTURE	Rubi Sut Assam Agricultural University, Jorhat-13.	rubisutmunmuni@gmail.com	Poster
22.	CROP PHENOTYPING USING UAV AND OTHER AERIAL SYSTEMS- PRESENT SCENARIO	Sumon Dutta and Prakash Borah Seed Science and Technology Programme, Department of Plant Breeding and Genetics, Assam Agricultural University, Jorhat-785013 AICRP on Seeds (Crops), Department of Plant Breeding and Genetics, Assam Agricultural University, Jorhat-785013	prakash.borah@aau.ac.in	Poster
23.	ARTIFICIAL INTELLIGENCE (AI) AND INTERNET OF THINGS(IOT) IN PRECISE EVALUATION OF CITRUS CANCKER DISEASE SUPPRESSION IN ASSAM LEMON	Swagata Saikia ¹ , Dr. L.C. Bora ² and Dr. P.K. Borah ³ PhD Scholar, Dept. of Plant Pathology, AAU, Jorhat-13 Retd.Prof& HOD, Dept. of Plant Pathology, AAU, Jorhat-13 Professor, Dept. of Plant Pathology, AAU,	swagatasaikia1994@gmail.com	Poster

		Jorhat-13		
24.	APTAMER BASED BIOSENSOR FOR DETECTION OF MYCOTOXIN IN FOOD SAFETY MONITORING	Tanushree Borgohain ¹ , Aparna Saha ² , Abhik Gogoi ¹ , Saurav Bhowmick ³ , Vijayendra Bhalla ⁴ , Robin Chandra Boro ^{1*} ¹ Department of Agricultural Biotechnology, Assam Agricultural University, Jorhat-785013, India ² Department of Chemistry, Gauhati University, Jorhat-781014, India ³ Department of Chemistry, Indian Institute of Technology, Guwahati-781039, India ⁴ CSIR- Institute of Microbial Technology, Chandigarh-160036	robin.boro@aau.ac.in	Poster
25.	MONITORING LAND USE/COVER CHANGES USING REMOTE SENSING AND GIS TECHNIQUES: A CASE STUDY OF DANG DISTRICT OF GUJARAT	V. T. Shinde ¹ ; M. Singh ¹ ; S. S. Salunkhe ² and S. V. Shinde ² ¹ Department of Agricultural Engineering, N.M. College of Agriculture, Navsari Agricultural University, Navsari, Gujarat, – 396 450 ² Department of SWCE, Dr BSKKV, Dapoli, Maharashtra-415713	vipulshinde123@gmail.com	Oral
26.	GEOSPATIALASSESSMENTOFSOILLOSSUSINGUSLEINDIKHARIWATERSHEDUNDERDHEMAJIDISTRICTOFASSAM.	¹ Parismita Dutta, ¹ D. K. Patgiri and ² Bipul Deka ¹ Department of SoilScience, AssamAgriculturalUniversity, Jorhat-785013, India ² AICRPon IrrigationWaterManagement, AssamAgriculturalUniversity, Jorhat-785 013, India	duttaparismita27@gmail.com , dilip.patgiri@aau.ac.in , bipul.deka@aau.ac.in	Oral
27.	ASSESSMENT OF CLIMATOLOGICAL IMPACT ON	Tintoli A. Kuho* ^{1,2} , Kedovikho Yhoshü ¹ , Rocky Pebam ² , S.P. Aggarwal ²	tintolikuho96@gmail.com	Poster

	THE VEGETATION COVER IN NAGALAND USING GEOSPATIAL TECHNIQUES	¹ Department of Geography, Nagaland University, Lumami, Zunheboto-798627 ² North Eastern Space Applications Centre, Umiam-793103, Shillong, Meghalaya		
28.	STARTING OF THE SEASON MAPPING FOR KHARIF RICE IN ASSAM USING SENTINEL 1A SAR DATA	Senpakapriya V, Jonali Goswami, K. K. Sarma, S. P. Aggarwal, North Eastern Space Applications Centre, Umiam – 793103, Meghalaya	senpakapriya12@gmail.com , jonali.goswami@gmail.com , spaggarwal2010@gmail.com	Oral
29.	EVALUATION OF MODIS GROSS PRIMARY PRODUCTIVITY (GPP) FOR AGRICULTURAL DROUGHT ASSESSMENT IN NORTH EAST INDIA FOR RABI SEASON USING GOOGLE EARTH ENGINE	Pranjit Kalita, Senpakapriya V, Jonali Goswami North Eastern Space Applications Centre, Umiam – 793103, Meghalaya	pranzitkalita@gmail.com , senpakapriya12@gmail.com , jonali.goswami@gmail.com	Poster
30.	CROP LAND INUNDATION ASSESSMENT USING GEOSPATIAL TOOLS - MORIGAON DISTRICT OF ASSAM	Bipul Saikia ^{1,2} and Shukla Acharjee ² ¹ North Eastern Space Applications Centre, Umiam – 793103, Meghalaya ² Dibrugarh University, Dibrugarh, Assam-786004	saikiabipul22@gmail.com	Poster
31.	ESTIMATION OF CROP WATER REQUIREMENTS FOR KHARIF RICE OVER RI-BHOI DISTRICT OF MEGHALAYA	Evakordor Jyrwa ^{1,2} , R.K. Singh ¹ and Jonali Goswami ² ¹ G.B.Pant University of Agriculture and Technology, Pantnagar, Udham Singh Nagar, Uttarakhand – 263145 ² North Eastern Space Applications Centre, Umiam - 793103	jenova.jyrwa65@gmail.com , rajksingh19@gmail.com , jonali.goswami@gmail.com	Oral

--	--	--	--	--

Panel Discussion:

Topic: Advances in spaceborne hyperspectral remote sensing

- 1) Dr. SP. Agrawal, Director NESAC
- 2) Dr. Binoy K. Medhi, Prof. Soil Science
- 3) Dr. Renaud, The International Rice Research Institute , Philippines
- 4) Dr. B. K. Medhi Chair: Dr. SP. Agrawal, Director NESAC
- 5) Dr. Bijoy Krishna Handique, Scientist/Engineer at North Eastern Space Applications Centre (NESAC)
- 6) Dr. Jonali Goswami¹, North Eastern Space Applications Centre, Umiam-793103, Assam Agricultural University, Jorhat-785013
- 7) V. T. Shinde¹ Department of Agricultural Engineering, N.M. College of Agriculture, Navsari Agricultural University, Navsari, Gujarat, – 396 450

*Chairperson and Co-chairperson will judge both oral and poster presentation session.

*After completion of the oral presentations, the poster presentations will be judged.

* Rapporteurs will submit the proceedings same day to Dr. P. K. Barua, Professor, PBG & Chairman, Technical Committee covering the particulars of presented papers, results and outcome of the sessions. (mail id:purna.barua@aau.ac.in)